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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,747	06/18/2001	Hugo Alberto Emilio Santini	SJO920000108US1	5649

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10/22/2003

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EXAMINER

TUGBANG, ANTHONY D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,747

Applicant(s)

EMILIO SANTINI, HUGO
ALBERTO

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-15, 17-19 and 23-44 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 11, 13, 14 and 23-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species B, Claims 1-4, 7-10, 15 and 17-19 in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 5, 6, 11, 13, 14 and 23-44 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Specification

3. The abstract of the disclosure is objected to because the abstract is not directed to the claimed invention, i.e. method. Correction is required. See MPEP § 608.01(b).
4. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;

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- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.**

Extensive mechanical and design details of apparatus should not be given.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Process of Fabricating a Write Head with Protection of a Second Pole Tip Thickness.

Claim Objections

6. Claim 15 is objected to because of the following informalities: the phrase of --of the second pole tip--, should be added after "stitch region" (line 4). Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 10, 15 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 10, the phrase of "the first pole piece layer" (line 2) lacks positive antecedent basis.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al 5,805,391.

Chang discloses a method of making a magnetic head comprising: forming a second pole tip of a second pole piece P2 (in Fig. 11) with a top surface and a bottom surface at an ABS site for the ABS; the top surface of the second pole tip having a write region located at the ABS site and a stitch region which is recessed upward from the ABS site, or recessed upward from the lower write region (shown in Fig. 11); depositing a protective sacrificial layer on the write region of the second pole tip; and forming a second pole piece yoke of a second pole piece 140 magnetically connected, or in direct contact with, the stitch region of the second pole tip.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stageberg et al 6,018,862.

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Stageberg discloses a method of making a magnetic head comprising: forming a second pole tip 108 of a second pole piece with a top surface and a bottom surface at an ABS site for the ABS (see Fig. 14); the top surface of the second pole tip having a write region (top flat portion of 108) and a stitch region (curved downward portion of 108) that is recessed from the ABS site toward a back gap; depositing a sacrificial layer (insulating layer 102); and forming a second pole piece yoke 114 of a second pole piece that is magnetically connected to, or in direct contact with, the stitch region of the second pole tip.

The process steps above are disclosed in a third embodiment (see col. 5, lines 66+) and within this third embodiment, Stageberg does not teach that the sacrificial layer 102 is deposited on the write region of the second pole tip.

Stageberg teaches in another or first embodiment (Fig. 6), depositing a sacrificial layer 30 on an entire top surface of the second pole tip 28.

Regarding Claim 2, Stageberg further teaches removing the sacrificial layer 30 from the entire top surface of the second pole tip (see sequence of Figs. 6 and 7). The benefits of the sacrificial layer 30 of Stageberg in the first embodiment form an art recognized equivalent insulator and coil structure between the first and third embodiments. It is further noted that deposition of the sacrificial layer 30 on the entire top surface of the second pole tip 28 in the first embodiment would be inclusive of the entire top surface, i.e. stitch region and write region, of the second pole tip 108 in the third embodiment.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the third embodiment of Stageberg by depositing a sacrificial layer on an entire top surface of the second pole tip inclusive of the stitch and write regions, as taught

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by the first embodiment of Stageberg, to positively form an art recognized equivalent magnetic head insulator and coil structure.

Regarding Claim 3, it would have been an obvious matter of design choice to choose any desired material of the sacrificial layer since the applicant has not disclosed that the claimed material of "alumina" solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the insulator material of the sacrificial layer taught by Stageberg et al. Moreover, the material of the sacrificial layer as claimed, has no manipulative difference in the process steps above when compared to Stageberg et al.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stageberg et al in view of Chang et al.

Stageberg discloses the claimed manufacturing method as relied upon above. Stageberg does not teach all of the limitations of Claim 4.

Chang teaches an MR forming process including: forming a first shield layer S1; forming first and second read gap layers 54, 56; forming a read sensor 52; and forming the first and second read gap layers 54, 56 between the first shield layer S1 and the second pole piece layer 140. The above structure is necessary to form a combined inductive read/write head and allow the magnetic head to both record and write information to a magnetic medium, i.e. magnetic disc.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Stageberg by including the additional elements in Claim 4 of the MR forming process of Chang, to positively form a combined inductive

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read/write head and advantageously allow the magnetic head to both record and write information to a magnetic medium, i.e. magnetic disc.

Allowable Subject Matter

14. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claims 10, 15 and 17-19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599.

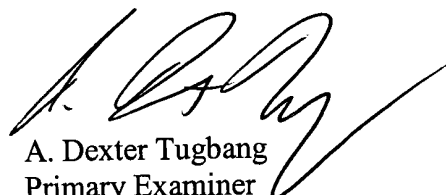
The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

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A. Dexter Tugbang
Primary Examiner
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October 17, 2003